



#2 61 2631
5.14.03

Attorney Docket No: 42390P15417

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)

Hemanth T. Sampath et al.)

Application No.: 09/880,574)

Filing Date: June 13, 2001)

For: ADAPTIVE CHANNEL)
ESTIMATION FOR WIRELESS)
SYSTEMS)

Assistant Commissioner for Patents
Washington, D.C. 20231

Examiner: ***

Art Unit: 2631

RECEIVED

MAY 05 2003

Technology Center 2600

I hereby certify that this correspondence is being forwarded
with the United States Postal Service as first class mail with
sufficient postage in an envelope addressed to the
Assistant Commissioner for Patents, Washington, D.C. 20231

on 4/25/03
Date of Deposit
Marti Bickler
Name of Person Mailing Correspondence
Marti Bickler 4/25/03
Signature Date

REVOCATION AND POWER OF ATTORNEY

The assignee, Intel Corporation, of the above-identified Patent Application, hereby
revokes all previous powers of attorney given in this Patent Application, and appoints the firm
identified below and individual.

Intel Corporation, a corporation, certifies that it is the assignee of the entire right, title and
interest in the patent application identified above by virtue of an Assignment from the inventor(s)
of the patent application identified above. The Assignment was recorded in the Patent and
Trademark Office at Reel _____, Frame _____
_____, or when the Assignment has not yet been recorded, a copy thereof is attached.

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, a firm including: Ramin Aghevli, Reg.
No. 43,462; William E. Alford, Reg. No. 37,764; Farzad E. Amini, Reg. No. 42,261; W.
Thomas Babbitt, Reg. No. 39,591; Jordan M. Becker, Reg. No. 39,602; Michael A.
Bernadicou, Reg. No. 35,934; Roger W. Blakely, Jr., Reg. No. 25,831; R. Alan Burnett, Reg.
No. 46,149; Gregory D. Caldwell, Reg. No. 39,926; Thomas M. Coester, Reg. No. 39,637;
Robert P. Cogan, Reg. No. 25,049; Florin A. Corie, Reg. No. 46,244; Mimi D. Dao, Reg. No.
45,628; Stephen M. De Klerk, Reg. No. 46,503; Daniel M. De Vos, Reg. No. 37,813; Sanjeet
Dutta, Reg. No. 46,145; Tarek N. Fahmi, Reg. No. 41,402; Thomas S. Ferrill, Reg. No.

42,532; George L. Fountain, Reg. No. 37,374; Angelo J. Gaz, Reg. No. 45,907; Andre M. Gibbs, Reg. No. 47,593; James Y. Go, Reg. No. 40,621; Mark A. Goldstein, Reg. No. 50,759; Michael D. Graham, Reg. No. 51,751; Melissa A. Haapala, Reg. No. 47,622; Alan E. Heimlich, Reg. No. 48,808; James A. Henry, Reg. No. 41,064; William E. Hickman, Reg. No. 46,771; Willmore F. Holbrow III, Reg. No. 41,845; Sheryl Sue Holloway, Reg. No. 37,850; George W. Hoover II, Reg. No. 32,992; Libby H. Hope, Reg. No. 46,774; Eric S. Hyman, Reg. No. 30,139; William W. Kidd, Reg. No. 31,772; Walter T. Kim, Reg. No. 42,731; Eric T. King, Reg. No. 44,188; Steve Laut, Reg. No. 47,736; Suk S. Lee, Reg. No. 47,745; Gordon R. Lindeen III, Reg. No. 33,192; Jan C. Little, Reg. No. 41,181; Julio Loza, Reg. No. 47,758; Joseph Lutz, Reg. No. 43,765; Lawrence E. Lycke, Reg. No. 38,540; Michael J. Mallie, Reg. No. 36,591; Andre L. Marais, Reg. No. 48,095; Raul D. Martinez, Reg. No. 46,904; Paul A. Mendonsa, Reg. No. 42,879; Jonathan S. Miller, Reg. No. 48,534; Richard A. Nakashima, Reg. No. 42,023; Thien T. Nguyen, Reg. No. 43,835; Thinh V. Nguyen, Reg. No. 42,034; Robert B. O'Rourke, Reg. No. 46,972; Daniel E. Ovanezian, Reg. No. 41,236; Gregg A. Peacock, Reg. No. 45,001; Philip A. Pedigo, Reg. No. P-52,107; Marina Portnova, Reg. No. 45,750; Michael A. Proksch, Reg. No. 43,021; Joseph A. Pugh, Reg. No. P-52,137; James H. Salter, Reg. No. 35,668; William W. Schaal, Reg. No. 39,018; James C. Scheller, Reg. No. 31,195; Saina S. Shamilov, Reg. No. 48,266; Kevin G. Shao, Reg. No. 45,095; Stanley W. Sokoloff, Reg. No. 25,128; Judith A. Szepesi, Reg. No. 39,393; Edwin H. Taylor, Reg. No. 25,129; Lisa Tom, Reg. No. P-52,291; John F. Travis, Reg. No. 43,203; Thomas J. Treutler, Reg. No. 51,126; Kerry D. Tweet, Reg. No. 45,959; Mark C. Van Ness, Reg. No. 39,865; Thomas A. Van Zandt, Reg. No. 43,219; Lester J. Vincent, Reg. No. 31,460; Glenn E. Von Tersch, Reg. No. 41,364; John P. Ward, Reg. No. 40,216; Mark L. Watson, Reg. No. 46,322; Thomas C. Webster, Reg. No. 46,154; and Norman Zafman, Reg. No. 26,250; my patent attorneys, and Brent E. Vecchia, Reg. No. 48,011, and Lehua Wang, Reg. No. 48,023; my patent agents, of BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP, with offices located at 12400 Wilshire Boulevard, 7th Floor, Los Angeles, California 90025, telephone (310) 207-3800, and Alan K. Aldous, Reg. No. 31,905; Ed Brake, Reg. No. 37,784; Ben Burge, Reg. No. 42,372; Robert A. Burtzlaff, Reg. No. 35,466; Richard C. Calderwood, Reg. No. 35,468; Jeffrey S. Draeger, Reg. No. 41,000; Cynthia Thomas Faatz, Reg. No. 39,973; Jeffrey B. Huter, Reg. No. 41,086; John Kacvinsky, Reg. No. 40,040; Seth Z. Kalson, Reg. No. 40,670; David J. Kaplan, Reg. No. 41,105; Peter Lam, Reg. No. 44,855; Anthony Martinez, Reg. No. 44,223; Paul Nagy, Reg. No. 37,896; Dennis A. Nicholls, Reg. No. 42,036; Leo V. Novakoski, Reg. No. 37,198; Lanny Parker, Reg. No. 44,281; Thomas C. Reynolds, Reg. No. 32,488; Kenneth M. Seddon, Reg. No. 43,105; Mark Seeley, Reg. No. 32,299; Steven P. Skabrat, Reg. No. 36,279; Howard A. Skaist, Reg. No. 36,008; Robert G. Winkle, Reg. No. 37,474; Sharon Wong, Reg. No. 37,760; Steven D. Yates, Reg. No. 42,242; Calvin E. Wells, Reg. No. 43,256 and Charles K. Young, Reg. No. 39,435, my patent agents, of INTEL CORPORATION; and James R. Thein, Reg. No. 31,710, my patent attorney; with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of undersigned's knowledge and belief, title is in the assignee identified above.


The individual whose signature appears below is authorized to execute this Power of Attorney on behalf of Intel Corporation.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Please direct all communications concerning this Application to:

Michael Proksch
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
12400 Wilshire Boulevard, Seventh Floor
Los Angeles, CA 90025
(408) 720-8300

Date: April 22, 2003

By: 
David Simon
Chief Patent Counsel
Intel Corporation

U.S. PATENT APPLICATION ASSIGNMENT

This U.S. Patent Application Assignment (this "Assignment") is made as of September 18, 2002 by **Iospan Wireless, Inc.**, a Delaware corporation ("Assignor"), to **Intel Corporation**, a Delaware corporation ("Assignee").

RECITALS

A. Assignor and Assignee have entered into an Asset Purchase Agreement dated as of September 18, 2002 (the "Purchase Agreement"). All capitalized terms used herein but not otherwise defined shall have the meanings set forth in the Purchase Agreement.

B. Pursuant to the Purchase Agreement, Assignor desires to assign to Assignee all of Assignor's right, title and interest in and to patent applications filed with the United States Patent and Trademark Office and set forth on Exhibit A hereto (the "Patent Applications").

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing premises, the mutual covenants and agreements contained in the Purchase Agreement and the covenants and agreements in this Assignment and to induce Assignee to consummate the transactions contemplated by the Purchase Agreement, Assignor agrees as follows:

1. Assignor does hereby sell, transfer, convey, assign and deliver to Assignee all of Assignor's right, title and interest in and to the Patent Applications and any patents that may issue therefrom, including any foreign counterparts, divisions, continuations, or reissues of such patents, the same to be held by Assignee for Assignee's own use and enjoyment, and for the use and enjoyment of Assignee's successors, assigns and other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment and sale had not been made; together with all claims for Damages by reason of past infringements of the Patent Applications, along with the right to sue for and collect such Damages for the use and benefit of Assignee and its successors, assigns and other legal representatives.

2. Assignor hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any officer of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of intellectual property protection or applications as aforesaid, to issue the same to Assignee and its successors, assigns and other legal representatives in accordance with the terms of this instrument.

3. Assignor hereby covenants with Assignee and the successors and permitted assigns of Assignee that, from time to time after the date hereof, Assignor will promptly execute and deliver to Assignee or shall promptly procure the execution and delivery of any and all such instruments of sale, transfer, conveyance, assignment and delivery, consents, assurances, powers of attorney and other instruments as may reasonably be requested by Assignee in order to vest in

Assignee all of Assignor's right, title and interest in and to the Patents and carry out the purpose and intent of this Assignment and the Purchase Agreement.

IN WITNESS WHEREOF, Assignor has executed this Assignment on the date first above written.

IOSPAN WIRELESS, INC.

By: 

Name: Levent Gun

Title: President and Chief Executive Officer

EXHIBIT A

| <u>Title</u> | <u>Filing Date</u> | <u>Serial No.</u> |
|---|--------------------|-------------------|
| Data Routing For Spatial Multiplexing In A Cellular Network | 7/30/99 | 09/518,500 |
| Subscriber Unit Incorporating Spatial Multiplexing | 4/7/00 | 09/545,434 |
| Subscriber Unit In A Hybrid Link Incorporating Spatial Multiplexing | 4/7/00 | 09/564,770 |
| A Cellular Wireless Re-Use Structure That Allows Spatial Multiplexing And Diversity Communication | 6/9/00 | 09/591,015 |
| Method And System For Mode Adaptation In Wireless Communication Systems | 6/30/00 | 09/609,591 |
| Spatial Separation And Multi-Polarization Of Antennas In A Wireless Cellular Network | 7/21/00 | 09/621,119 |
| Wireless Communications System That Supports Multiple Modes Of Operation | 9/1/00 | 09/653,060 |
| An Apparatus And Method For Optimizing Data Transfer Capacity Of A Multiple Base Transceiver Station Cellular Wireless Network System | 9/28/00 | 09/678,179 |
| Method And System For Adapting A Wireless Link In Response To Measured Error Rates | 9/29/00 | 09/676,410 |
| Mode Selection For Data Transmission In Wireless Communication Channels Based On Statistical Parameters | 9/19/00 | 09/665,149 |
| Interference Mitigation In Wireless Communications | 10/13/00 | 09/687,965 |

| | | |
|---|----------|------------|
| By Training Of Interfering Signals | | |
| A System And Method For Data Transmission From Multiple Wireless Base Transceiver Stations To A Subscriber Unit | 11/8/00 | 09/708,170 |
| A System And Method For Synchronizing Data Transmission From Multiple Wireless Base Transceiver Stations To A Subscriber Unit | 12/4/00 | 09/729,886 |
| Mode Lookup Tables For Data Transmission In Wireless Communication Channels Based On Statistical Parameters | 12/1/00 | 09/730,687 |
| Method And System For Evaluating A Wireless Link | 12/22/00 | 09/745,767 |
| A Method And System For Controlling The Flow Of Data In A Base Transceiver Station | 2/1/01 | 09/775,860 |
| Adaptive Channel Allocation Technique For Wireless Communications Systems | 2/6/01 | 09/778,323 |
| A Method, System And Apparatus For Displaying The Quality Of Data Transmissions In A Wireless Communication System | 3/6/01 | 09/813,656 |
| A Method And System For Scheduling The Transmission Of Wireless Data | 3/23/01 | 09/816,652 |
| Management And Scheduling Of Data That Is Wirelessly Transmitted Between A Base Transceiver Station And Subscriber Units | 3/27/01 | 09/819,947 |
| Method And Wireless | 6/6/01 | 09/876,896 |

| | | |
|--|---------|------------|
| Communications Systems For Interference Mitigation (Continuation of GWI-101) | | |
| Wireless Communication Systems With Adaptive Channelization And Link Adaptation | 6/5/01 | 09/875,806 |
| Channel Interpolation Filters In OFDM Systems | 6/11/01 | 09/880,574 |
| Spatial Multiplexing Using Co-Located Antennae With Multiple Polarizations Suitable For Mobile Applications | 6/4/01 | 09/873,449 |
| A Wireless System Contention Management Procedure | 5/31/01 | 09/870,706 |
| A Method And System For Adapting A Wireless Link To Achieve A Desired Channel Quality | 6/28/01 | 09/894,448 |
| A System And Method For Error Correction Coding Wirelessly Transmitted Information In A Multiple Antennae Communication System | 7/5/01 | 09/900,110 |
| A System And Method Of Classifying Remote Users According To Link Quality, And Scheduling Wireless Transmission Of Information To The Users Based Upon The Classifications | 7/24/01 | 09/912,814 |
| A System And Method For Circulant Transmit Diversity | 7/24/01 | 09/912,800 |
| A System And Method For Simulating A MIMO Transmission Channel | 8/28/01 | 09/942,838 |
| Transmit Signal Preprocessing Based On Transmit Antennae Correlations For Multiple | 9/5/01 | 09/948,204 |

| | | |
|---|----------|------------|
| Antennae Systems | | |
| A System And Method For Providing Automatic Re-Transmission Of Wirelessly Transmitted Information | 10/9/01 | 09/975,128 |
| A System And Method For Transmit Diversity Based Upon Transmission Channel Delay Spread | 11/27/01 | 09/999,438 |
| A System And Method For Multiple Signal Carrier Time Domain Channel Estimation | 12/14/01 | 10/23,632 |
| A System And Method Of Dynamically Optimizing A Transmission Mode Of Wirelessly Transmitted Information | 2/5/02 | 10/072,359 |
| A Multiple Channel Wireless Receiver | 3/25/02 | 10/107,124 |
| A Robust Multiple Chain Receiver | 3/25/02 | 10/107,237 |
| A Method And System For Multiple Chain Wireless Receiver And Transmitter Phase And Amplitude Correction | 5/29/02 | 10/158,734 |
| A Method And System Of Biasing A Timing Phase Estimate Of Data Segments Of A Received Signal | 6/19/02 | 10/176,300 |
| A Method And System For Adjusting A Power Level Of A Transmission Signal Based Upon A Peak To Average Ratio | 7/2/02 | 10/189,755 |
| A Method And System Of Frequency And Time Synchronization Of A Transceiver To Signals Received By The Transceiver | 9/16/02 | |

Acknowledgment by Notary Public

State of California

County of Santa Clara

On this 17th day of Sept, 2002 before me, the undersigned Notary Public, personally appeared Levent Can, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he or she executed the same.

Seal:

Signature: _____

Name: _____

_____, Notary Public

